GPT/BNSF Custer Spur EIS Co-Lead Agencies
c/o CH2M HILL

Dear Agency Review Team:

I am a Whatcom County resident living at 1604 20th St., Bellingham, WA. I am a husband, and a father to two young boys. I am a professional scientist, a recreational fisherman and crabber, a botanist, a birdwatcher, and I spend my free time outdoors whenever possible. In short, I care deeply about the environment, economy, and quality of life in Whatcom County.

I believe that the scale and substance of the proposed Gateway Pacific Terminal (GPT) coal export facility at Cherry Point carry far-reaching consequences for all residents of Whatcom County and the state of Washington. I regard a detailed, comprehensive, and thorough Environmental Impact Statement (EIS) at a scale commensurate with the scale of the GPT (i.e. regional and global as well as local) to be of the utmost importance. I respectfully request that the EIS please address, in a programmatic fashion, the following impacts on the natural and human environment, and possible mitigation requirements:

1) Please determine the total amount of CO2 and black soot emissions that would result from the mining, transport by rail, export by cargo ship, and burning of millions of tons of coal exported annually through the port. U.S. demand for coal is forecast to remain steady or decline slightly for the foreseeable future, so one cannot argue that the coal exported through Cherry Point would be burned anyway whether or not GPT is built. Instead, the coal-related emissions would be a direct, specific, and non-duplicable result of building and operating the Export Facility. They must be considered in the EIS for it to be credible.

Accordingly, please study how the resulting CO2 and black soot emissions will impact and accelerate climate changes in Washington state. Please study the emission-related impacts on ocean acidification patterns affecting marine ecosystems and shellfish; on the future status of glaciers in Washington state; and on snowmelt and rainfall contributing to river and stream flows, particularly summer flows that are crucial to salmon populations and agriculture. Please include projections for extreme weather events in Washington (e.g. drought, landslides and flooding from high rainfall events) that climate modeling suggests may increase due to increasing greenhouse gas emissions.

Please assess how CO2 and black soot emissions from the GPT export facility will offset the goals established by Washington State to reduce greenhouse gas emissions as adopted by our state legislature in 2008. "Washington State adopted greenhouse gas reduction standards via legislation adopted in 2008. (RCW 70.235.070(1)(a). The statute establishes that by 2020, emissions shall be reduced to 1990 levels. By 2035, GHG

emissions are to be 25 percent below 1990 levels and by 2050, they are to be 50 percent below 1990 levels." (James Wells, Don't Pee In The Pool!, January 5, 2013)

2) Please evaluate the environmental and health impacts from the mercury and other pollutants that would result from burning over 40 millions of tons of coal exported annually through the GPT. Pollutants produced by burning coal in Asia are known to be transported in the atmosphere across the Pacific Ocean, and have a measurable negative impact on the air quality and environmental health of Washington state. Please model and assess the cumulative impacts of all known pollutants subject to long-distance transport that would result from burning over 40 millions of tons of coal exported annually through the GPT.

3) Please also study and model the diesel particulate pollution that would result from locomotives and ships transporting coal through our region to and from the GPT. I specifically request that you determine how many excess deaths and hospitalizations would be expected in Washington state from diesel particulate matter from GPT-related diesel locomotive and ship traffic. Please include comparisons of baseline and expected rates of asthma, cancer, stroke, and heart attack. My family lives less than a mile from the BNSF rail tracks, so this information is of great importance for our future health.

4) Please conduct a thorough, comprehensive, vessel traffic study that addresses the increased environmental risks associated with the ship traffic generated by the Gateway Pacific Terminal along the full North Pacific route to Asia. The long-distance movements of fish stocks, marine mammal populations, and ocean currents clearly demonstrate that the North Pacific Ocean is an integrated ecosystem. For the vessel traffic study to be credible and meaningful, it must address environmental impacts and risks not just in Washington state, but also in Canadian and Alaskan waters.

Accordingly, please study the increased risk of collision, allison, or grounding of all vessels while navigating shipping lanes around the San Juan and Gulf Islands. Please identify the measures that would be needed to reduce the risks to vessels, shorelines, and public safety from shipping accidents. Please evaluate the increased risk and consequences to the economy, wildlife, and the environment by any oil or cargo spill in or near the San Juan or Gulf Islands. Please assess the economic consequences of increased ship traffic and oil spill on the shellfish, tourism, recreational boating and fishing industries of the San Juan Islands. Please study the harmful effects on marine mammals of mechanical and surface sound propagation into the Salish Sea and the waters surrounding the San Juan and Gulf Islands that would result from increased ship traffic associated with the GPT. Please specifically identify how additional ship noise will affect the foraging, rearing of young, social interactions, and suvivorship of federally listed Southern Resident Killer Whales. Please also assess the increased potential for vessel strike to marine birds and mammal species due to the ship traffic associated with GPT.

Please also assess the environmental risks of larger and greater numbers of ships using the Strait of Juan de Fuca and Unimak Pass, Alaska along the great circle route to Asia. Please include evaluation of the environmental consequences of being unable to contain an oil spill along the more remote British Columbia and Alaskan coasts along the great circle route.

5) Please examine the potential for disturbance of benthic sediments and fauna caused by cargo ships dropping and dragging anchors and chains on the sea floor while they wait to transfer materials at the GPT. The sheer size and number of ships involved could mean significant physical disruption of the sea floor at favorable anchoring sites. I am concerned about the potential impacts on benthic fauna, including the disturbance of sediments that have accumulated heavy metals and other pollutants via deposition from past industrial activities and environmental contamination. Each year I make multiple crabbing trips in Bellingham Bay and nearby areas, and I am concerned about the status of the Dungeness crab resource and potential health effects from eating crab that may be bioaccumulating pollutants

6) Please address the potential environmental impacts of coal dust (i.e. "fugitive coal particles") that would escape from the GPT via wind transport while in storage at the site. Coal dust contains a number of carcinogenic and neurotoxic compounds, including mercury, lead, cadmium, and polycyclic aromatic hydrocarbons. Please assess the impacts of fugitive coal particles on populations of Pacific Sand Lance, Pacific Herring, and other forage fish in the Cherry Point Marine Reserve and adjacent waters downwind of the GPT. Please address how such contaminants are likely to impact marine food webs, including salmon populations, marine bird populations, and marine mammal populations, all of which feed directly on forage fish. Please address potential food web impacts (including the concentration of persistent environmental pollutants from fugitive coal dust) on federally listed species such as Southern Resident Orcas, Coastal Bull Trout, Nooksack Chinook Salmon populations, and Marbled Murrelets, and proposed mitigation steps for these impacts. Each year I make multiple crabbing trips in Bellingham Bay and nearby areas, and I am concerned about the status of the Dungeness crab resource and potential health effects from eating crab that may be bioaccumulating pollutants that originate from coal dust or other industrial activities associated with GPT.

7) Please address the potential environmental and human health impacts of fugitive coal particles (both dust and chunks) that escape from rail cars while in transit to GPT from coal mine sources in Montana and Wyoming. Please include study of how other trains using the same tracks moving at higher speed might disperse the fugitive coal particles that originate from GPT train traffic. I live less than a mile from the BNSF tracks that would carry coal through Bellingham, and obviously have an abiding interest in the health of my family and our surrounding natural environment as it may be impacted by fugitive coal particles.

8) Please study the environmental impacts of the water withdrawals that will be needed to maintain the dust and fire suppression system for the coal that will be piled and stored at GPT. The water demands for GPT are estimated at 1.9 billion gallons per year—equivalent to half the water demands of the entire city of Bellingham. Please assess the impacts that these levels of water withdrawals will have on the Nooksack River ecosystem, including flora, fauna, federally listed species such as Chinook Salmon and Bull Trout, and wetlands function. Please assess these impacts taking into account modeling of future Nooksack River flow levels likely to occur under regional climate change (such as reduction of glacier-derived meltwater as temperatures warm and glacier volume shrinks in the North Cascades ecosystem). Please study how the GPT water withdrawals will impact other water users (such as irrigated agriculture and public water supplies) along the Nooksack River floodplain in Whatcom County.

9) Please study the impacts of GPT site infrastructure development and operations on the Cherry Point Marine Reserve. Specifically please address potential impacts on the Reserve's eel grass beds, foraging and rearing habitat for all resident and transient salmonid species (including federally listed coastal Bull Trout and Chinook Salmon stocks), ecologically unique staging and spawning habitat for Pacific Herring, habitat for shellfish and Dungeness crab. Please assess how the Cherry Point Marine Reserve will continue to meet conservation goals (as specified in the Reserve Management Plan) for all of the above species and habitats in light of GPT-related impacts, and all mitigation steps that will be necessary. Given the currently depressed populations of prominent species at Cherry Point such as Pacific Herring and marine birds (e.g. Marbled Murrelet, Western Grebe), ecological restoration of the Reserve has emerged as a management priority for the future. Please study how development of the GPT site will contribute to the ecological restoration of Cherry Point Marine Reserve.

10) Please study the impacts of GPT site infrastructure development and operations on freshwater wetland ecosystems at Cherry Point. Specifically please address potential impacts on wetland ecosystem function and resilience (including potential downstream effects) and on key wildlife habitats such as heron rookeries, and waterfowl staging and wintering grounds. Please assess the impact of habitat fragmentation at Cherry Point resulting from GPT site development.

I believe that my concerns expressed here accurately reflect how the potential impacts of the GPT proposal will unfold at regional and global scales as well as locally. I would like to reiterate that the EIS must similarly examine impacts at region and global scales. I find it very disturbing that so far the Army Corps of Engineers has not taken a comprehensive, programmatic approach to their review of environmental impacts of GPT and other coal export facility proposals around the Pacific Northwest—an essential step to ensuring a credible environmental impact review.

Thank you for taking my above comments into consideration, and I look forward to seeing the results of the scoping process.

Sincerely,

John Tuxill, PhD
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